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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/585,890

07/12/2006

Jane E. Tateson

36-1994

7657

23117 7590 10/16/2008  
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EXAMINER

KUNDU, SUJOY K

ART UNIT

PAPER NUMBER

2863

MAIL DATE

DELIVERY MODE

10/16/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/585,890	<b>Applicant(s)</b> TATESON, JANE E.	
	<b>Examiner</b> SUJOY K. KUNDU	<b>Art Unit</b> 2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07/12/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

The following references are listed in the specification and must be submitted on a PTO-892 form or deleted from the specification:

1. WO2004/001999 as seen on page 2 of the specification
2. WO2004/003510 as seen on page 2 of the specification
3. WB Heinzelman, AP Chandrakasan and H Balakrishnan, (Energy-Efficient Routing Protocols for Wireless Microsensor Networks, Proceedings of the 33<sup>rd</sup> International Conference on System Sciences (HICSS '00), January 2000 as seen on page 4 of the specification
4. A Cerpa, J elson, D Estrin, L Girod, M Hamilton, and J Zhao, "Habitat Monitoring: Application Driver for Wireless Communications Technology," ACM SIGCOMM Workshop on Data Communications in Latin American and the Caribbean, Costa, Rica, April 2001 as seen on pages 4-5 of the specification
5. GB0321096.0 as seen on page 11 of the specification

### ***Specification***

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-10, 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Wan (US 2002/0147024 A1).

With regards to Claim 1, 10, Wan teaches a sensor device having means for periodically generating a measured value of a property (Figure 5, 510, Page 4, Paragraph 53), comprising means for determining the rate of change in the measured property (Figure 5, 520, Page 4, Paragraph 54) and means for determining the values of the property being measured by similar devices (Page 4, Paragraph 55, "speed or rate of change of the received signal strength"), and means for adjusting the periodicity of measurement according to these values (Figure 5, 530, Page 7, Paragraph 86).

With regards to Claim 4, 13, Wan teaches a sensor device wherein the device has means for determining the values being measure by neighbouring devices (Figure 5, 510, Page 4, Paragraph 53) and means for controlling the device to reduce the frequency at which measurements are taken if neighbouring devices are obtaining the same values for the measurements (Page 6, Paragraph 71).

With regards to Claim 5, Wan teaches a sensor device, comprising a transmitter to broadcast the measurements being taken by the device and a receiver to receive such broadcasts from similar devices (Figure 3, 120, "transceiver," Page 3, Paragraph 42).

With regards to Claim 6, 14, Wan teaches a sensor comprising means for exchanging data with neighbouring devices for the purpose of relaying it to a data collection point (Figure 3, 130, "storage medium"), the data generated by the device or

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received from others being stored in a buffer until it can be transmitted (Page 3, Paragraph 42).

With regards to Claim 7, 15, Wan teaches a sensor device, the means for adjusting the periodicity of measurement being responsive to the level of such traffic ("travel") being handled by the device (Pages 5-6, Paragraph 71).

With regards to Claim 8, 16, Wan teaches a sensor device, having means for determining the level of data traffic being carried by one or more neighbouring devices (Figure 5, 510), means for comparing the traffic levels carried by the neighbouring devices with the traffic it is itself carrying (Pages 5-6, Paragraph 71), and means for transmitting control data to other devices if it is carrying less traffic ("slow traffic") than other devices (Page 5-6, Paragraph 71), and means for receiving such control data from devices identified as carrying less traffic than it is, the control data having the effect of adjusting the times at which the measurements are taken by the device receiving the control data (Pages 6, Paragraph 71).

With regards to Claim 9, 17, Wan teaches a sensor device, wherein the control data generated by the transmitting device controls the receiving device to reduce its data measurement rate ("...30 seconds to every 240 seconds...", Page 6, Paragraph 71).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3, 11-12, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wan (US 2002/0147024 A1).

With regards to Claim 2, 11, Wan teaches a sensor device, having means for determining the rate of change of the property being measured (Figure 5, 520, Page 4, Paragraph 54).

Wan teaches the limitations of reducing the frequency at which measurements for the purpose of conserving battery power (Page 6, Paragraph 71).

However, Wan is silent about increasing the frequency with which measurements are taken when the property being measured is changing. However, as stated above, Wan does teach adjusting the frequency to decrease the time the measurements are obtained for the purpose of conserving battery power (Page 6, Paragraph 71). As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made to increase the frequency to obtain additional measurements so as to provide more accurate data.

With regards to Claim 3, 12, Wan fails to teach the limitation of a sensor device comprising means for calculating the standard deviation of a predetermined number of preceding readings.

Although Wan fails to teach this limitation, the use of such a well known statistical analysis would have been obvious to one of ordinary skill. Specifically, absent a showing of criticality, the use of any well known statistically analysis, such as standard deviation, to process data into a useful form would have been obvious to an artisan to

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enable a user to make usefully meaning out of a large amount of data to determine the values of the property being measured.

With regards to Claim 18, Wan teaches the limitations of reducing the frequency at which measurements for the purpose of conserving battery power (Page 6, Paragraph 71).

However, Wan is silent about staggering the times at which they take measurements. However as stated above, Wan does teach adjusting the frequency to decrease the time the measurements are obtained for the purpose of conserving battery power (Page 6, Paragraph 71). As such, it would have been obvious to one of ordinary skill in the art at the time the invention was made to increase the frequency to obtain additional measurements and then reduce the frequency at which measurements for the purpose of conserving battery power in a staggering motion to obtain a range of data for statistical analysis.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SUJOY K. KUNDU whose telephone number is (571)272-8586. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 571-272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. K. K./  
Examiner, Art Unit 2863